

New Species of *Poecilmitis* Butler (Lepidoptera:
Lycaenidae) from Namaqualand, Cape,
South Africa

By W. H. HENNING*

Poecilmitis trimeni Riley stat. nov.

Poecilmitis thysbe trimeni Riley, 1938:

Trans. R. ent. Soc. Lond., **87**: 240.

Riley says in his original description, "This is a small pale race characterised by the smooth contour of the wings and the even black borders. The border shows no sign of the marked indentations which are so prominent in typical *P. thysbe* (L.), no trace of orange lunules, and only traces of pale grey cilia between the extremities of the veins." It has been generally accepted for some time that this is a good species in its own right, and the raising in status is now suggested. The species appears to be confined to its type locality of the Port Nolloth area, McDougall Bay, Namaqualand, and the type material is that cited at the time of the original description, viz., Holotype ♂ and allotype ♀ (B.M. Type No. Rh. 453 ♂, 454 ♀): Pt. Nolloth, Namaqualand, August 1890 (R. Lightfoot) (ex. Trimen coll.).

Poecilmitis dicksoni spec. nov.

Although this little *Poecilmitis* has often been confused with *P. trimeni* Riley in the past, it is actually more closely allied to *P. pan* Pennington and *P. beulah* Quickelberge.

P. dicksoni is a smaller, much darker insect than *P. trimeni* in that (a) the margins are twice the width of those of *P. trimeni* and (b) the veins are black, not orange as in the latter. The underside of *dicksoni* is variable, but is basically a flat brown, whereas *P. trimeni* is usually a dark brown with silvery markings.

This species was first discovered by Mr. C. G. C. Dickson and his nephew Mr. C. W. Wykeham, who caught a useful series of seven males south of Kamieskroon on 2nd September, 1962. C.G.C.D. says: "The specimens were found on a rough slope, with rocks and scattered vegetation and occurred here and there for a considerable distance as we ascended the slope in the direction of the summit. They had the usual irregular flight of members of the *thysbe* group within a circumscribed area and settled frequently on the ground or sometimes on rocks and stones." Dr. J. Kaplan subsequently visited the area on the 27th September, 1973 and took two females.

In December, 1974, Mr. Ivan Bampton came across *P. dicksoni* in numbers ranging from the coast of Hondeklipbaai, where he caught seven specimens, and along the road towards Wallekraal, 22 specimens 8 km. from Hondeklipbaai, 13 specimens at the 18 km. mark and three specimens further on. Bampton said that unlike *P. trimeni* which flies among scattered shrubby vegetation sheltered by sand dunes just beyond the highwater mark, and never penetrates very far inland,

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P. dicksoni was much more plentiful away from the coast. The vegetation in this area was more varied than that on the beach front and several plants were two or three feet high with the occasional *Rhus* bush reaching four to five feet. *P. dicksoni* appears to fly higher than *P. trimeni*, but frequently settles on the ground and sometimes on a twig in the lee of a small shrub.

The description is as follows: Orange with light metallic blue from bases in both wings, and black markings generally as in *P. trimeni*, but can be separated easily from this species by its heavier black margins and spots, the blackish veins in the apical area of the forewings, and paler, "flatter" underside.

Holotype male: *Upperside*.

Forewing. Iridescent blue extends up to black discocellular mark at the middle of the costa, crosses the inner portion of area 2, and below vein 2 almost covers the orange ground colour, extending to outer-margin from vein 1 down to inner-margin. The outer-margin is straighter than in *P. pan* or *P. beulah*. The costal black edging is well defined beyond the blue area, the post-discal black spots being large and conspicuous in the orange area, and the veins beyond them thinly black, with the outer-marginal black border very well developed. Length of forewing, from base to apex, 9 to 13 mm. (11 mm. in the holotype).

Hindwing. The dark blue portion extends from the base to halfway along the costa and almost two-thirds along the inner-margin, but the iridescent blue reaches and thinly covers all five post-discal black spots, leaving a fairly wide orange area between the blue and the hind-marginal border. This border is about half as broad as that of the forewing and extends down to vein 2, where it fades out. The shape of the hindwing is slightly more angular than in *P. trimeni* and the "tail" at vein 1 b is longer but thinner than in *P. pan* or *P. beulah*.

Cilia short, dark brown at end of veins, dark grey between the extremities of the veins, on both forewing and hindwing.

Underside. Forewing has the usual metallic-centre spots beyond vein 4, and the other black spots of the *thysbe* group; the markings being very similar to those of *P. pan*. The apex and hind-margin of the forewing and the whole of the hindwing is orange-buff, slightly darker than but very similar to *P. pan* with the striae on the hindwing faintly showing and a slightly more pronounced brown suffusion in areas 4 to 5.

Paratypes show little variation except that some males have the spots in the hindwing smaller and/or fainter, or even absent as in three of the paratypes.

Allotype female: *Upperside*.

Forewing. Similar to *P. beulah* in that the solid blue lacks the surface iridescence and is much reduced, hardly reaching a third of the way along the costa, and halfway along the inner-margin. There is a rectangular spot in the cell and a double spot in area 1 b. Beyond the post-discal spots, the veins are black as in the male, a feature also of *P. beulah*, but

Plate III

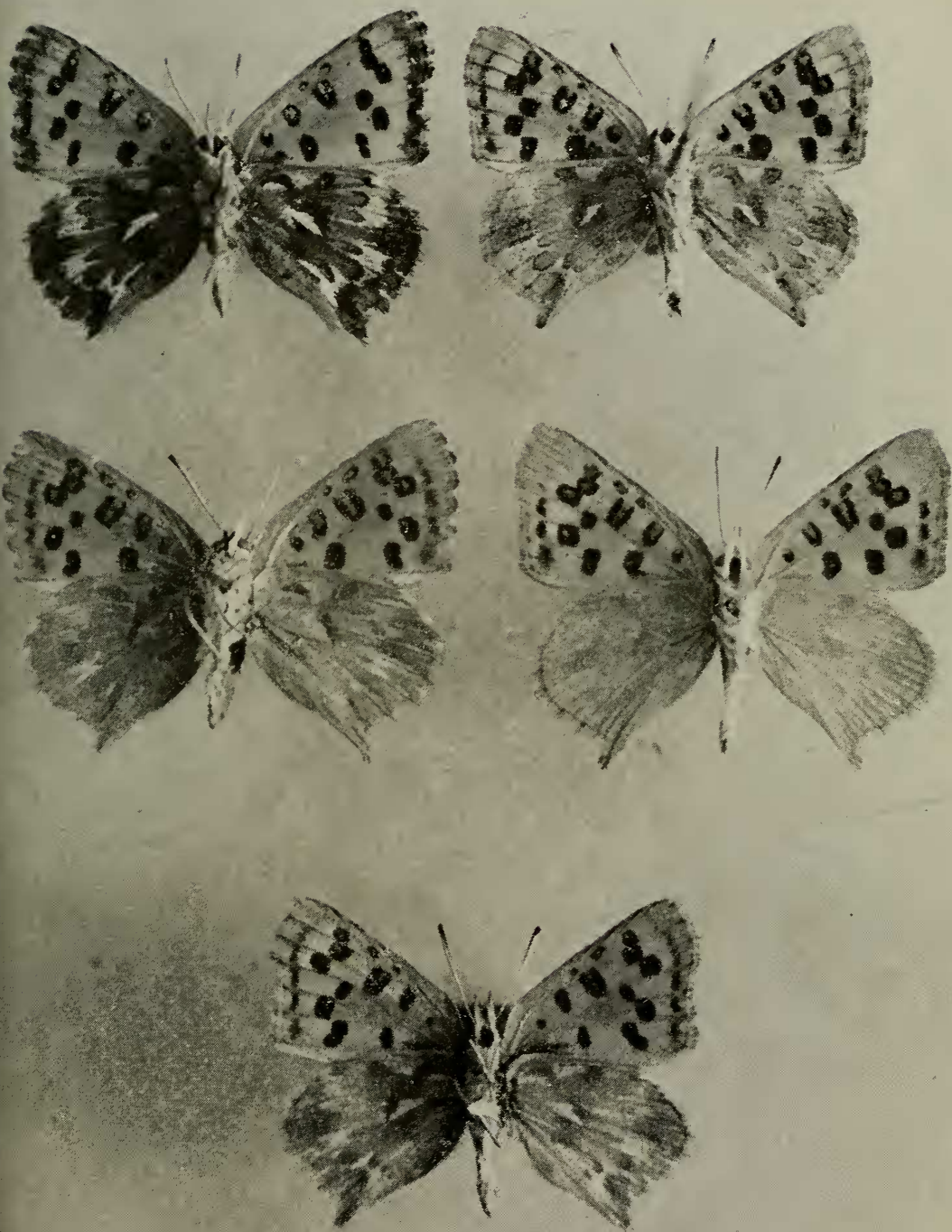


Photo: S. F. Henning

Poecilmitis trimeni Riley ♂

Poecilmitis dicksoni spec. nov. ♂

Poecilmitis beulah Quickelberge ♂

Poecilmitis pan Pennington ♂

Poecilmitis perseus spec. nov. ♂

Undersides x 2

Plate IV

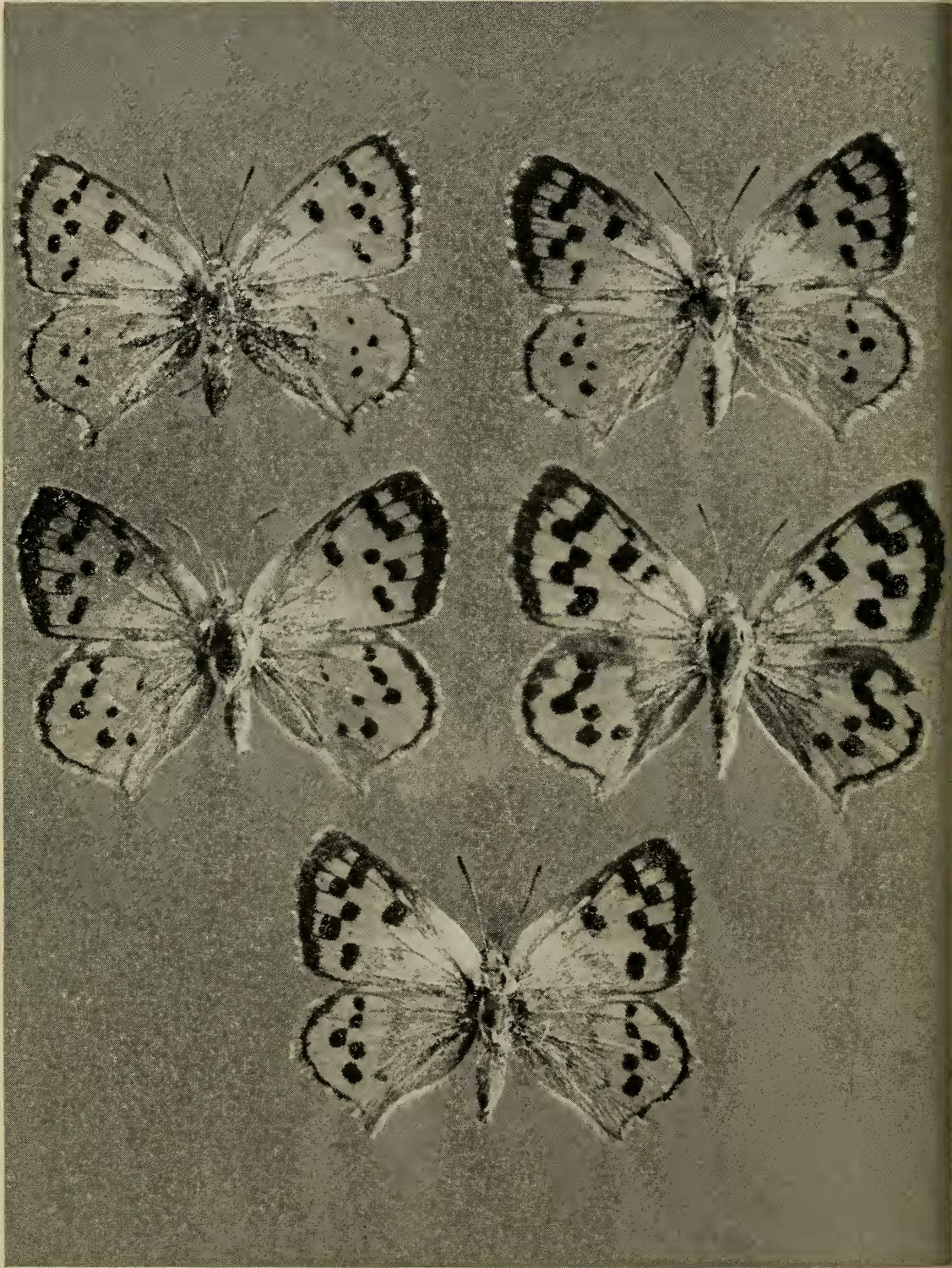


Photo: S. F. Henning

Poecilmitis trimeni Riley ♀

Poecilmitis dicksoni spec. nov. ♀

Poecilmitis beulah Quickelberge ♀

Poecilmitis pan Pennington ♀

Poecilmitis perseus spec. nov. ♀

Uppersides x 2

not of *P. trimeni*. The termen is much more rounded than in the male, and the cilia lighter grey between the vein extremities. Length of forewing, from base to apex, 9 to 14 mm. (12 mm. in the allotype).

Hindwing. The blue portion extends from the base to less than halfway along the costa, covering the cell and extending straight across to two-thirds of the way along the inner-margin, leaving clear the black spots in the orange area. The black marginal edging extends down to the "tail".

Underside. Similar to the male, except that the submarginal black streak of the forewing is more prominent, and the striae of the hindwing slightly more pronounced.

Paratypes are similar to the allotype, except for the hindwing where a sixth post-discal spot may be present in area 1 c.

On the underside the brownish suffusion in area 5 is usually present, but never very well developed. Sometimes the very faint whitish rays in area 3 of the hindwing are more noticeable, but the greyish patches present in *P. trimeni* are always lacking.

♂ Holotype. NAMAQUALAND: 18 kms. east of Hondeklipbaai, 15.xii.1974 (I. Bampton), deposited in the Transvaal Museum, Pretoria, South Africa.

♀ Allotype. NAMAQUALAND: 8 kms. east of Hondeklipbaai, 14.xii.1974 (I. Bampton), also in the Transvaal Museum.

Paratypes. NAMAQUALAND: Hondeklipbaai, five ♂♂, one ♀, 6.xii.74 (I. Bampton); two ♂♂, 24.ix.75 (Dr. J. Kaplan); 8 kms. east of Hondeklipbaai: six ♂♂, four ♀♀, 7.xii.74, four ♂♂, two ♀♀, 13.xii.74, two ♂♂, two ♀♀, 14.xii.74 (all I. Bampton); 18 kms. east of Hondeklipbaai: 10 ♂♂, three ♀♀, 15.xii.74 (I. Bampton); Wallekraal/Soebatsfontein road: two ♂♂, two ♀♀, 15.xii. 74 (I. Bampton). Some of these paratypes will be distributed to the British Museum, the Allyn Museum, Sarasota, Florida, U.S.A., the Transvaal Museum, and various private collections in South Africa; the remainder will stay in the Henning collection.

The butterfly is dedicated to Mr. C. G. C. Dickson who took the species in 1962 and as a small tribute to his valuable systematic work on South African Lycaenidae, and particularly, as a token of appreciation of the kind assistance received from him by the author over a period of many years.

Poecilmitis perseus spec. nov.

This is another small *Poecilmitis* which, hitherto, has been confused with *P. trimeni* Riley. Although Dr. G. Van Son took seven specimens at Hondeklipbaai, Namaqualand, as long ago as November 1933, credit for the discovery is really due to Mr. Ivan Bampton, who visited the Hondeklipbaai area in December 1974. Mr. Bampton said that the majority of *P. perseus* were collected either at the beach front south of Hondeklipbaai or not far inland along the road from Hondeklipbaai to Wallekraal. The statistics were: 19 on the beach front, 17 alongside the road 8 kms. from Hondeklipbaai, seven at the 18 km. mark, and one further on. Dr. J. Kaplan visited

the area on 24th September, 1975, and took five specimens at Hondeklipbaai and four at the 18 km. locality.

P. perseus was much easier to keep under observation, and appeared to fly at a slightly higher elevation than either *P. dicksoni* or *P. trimeni*. Mr. Bampton says: "Perhaps the main reason for my finding them easier to observe was the thicker ground vegetation with less open areas of white sand. Some of the small shrubs were almost a meter in height, and *perseus* when coming to rest chose the lee side of these small bushes, and used twigs as resting places as much as they did the ground. The terrain in this area differed from that at Mcdougall Bay, Port Nolloth, inasmuch as there were no sand dunes, the sand being of a permanent nature which would no doubt account for differences in the amount of vegetation."

Description as follows: Orange-yellow with extensive metallic blue from bases in both wings, and differs from *P. trimeni* and *P. dicksoni* in the more angular shape of the fore- and hindwings, paler, more yellowish ground-colour, the quality and extent of the blue and, like *P. dicksoni*, it is smaller and darker than *P. trimeni*.

Holotype: *Upperside*.

Forewing. The metallic blue is of a more solid, silvery greyish-blue with less iridescence than in *P. dicksoni* and extends to and obscures the black discocellular mark below the middle of the costa, then crosses diagonally over the wing, partially obscuring the spots in areas 2 and 3, and meets the well-defined marginal black border at vein 2. The termen is slightly angled above vein 4, being almost concave between vein 4 and tornus. The costal black edging beyond the blue area is not so well defined as in *P. dicksoni*, but the post-discal black spots in the orange area are also large and conspicuous, heavier than in *P. trimeni*. The veins between the post-discal spots and the margin are black as in *dicksoni*. Length of forewing, from base to apex, 10.5 to 14 mm. (11.5 mm. in the holotype).

Hindwing. The silvery-blue portion extends from the base to at least three-quarters of the way along the costa and more than two-thirds along the inner-margin, and obscures all but two of the post-discal black spots, leaving a relatively small orange area between the blue and the hind marginal border, which is narrower than in *P. dicksoni*. The spot in area 4 is slightly further from the base than in *dicksoni*, and as the hindwing angulation is slightly more pronounced, the two spots in areas 2 and 4 are almost parallel to the outer margin, whereas in *dicksoni* they are usually more in line with the end of vein 1 b.

Cilia dark brown at end of veins, grey between the extremities of the veins.

Underside. Similar to *P. dicksoni*, except that it is paler, the forewing being of a lighter orange and the hindwing a "flatter" brown, although the striae are slightly more distinct.

Paratypes show some variation in the shape of the fore-